

CLAIMS

1. A spectral distance calculator, comprising means for performing spectral distance calculations for comparison of an input spectrum, from an input signal in the presence of a noise signal, and a reference spectrum, characterized by memory means for pre-storing a noise spectrum from the noise signal, and means for masking the spectral distance between the input spectrum and the reference spectrum with respect to the pre-stored noise spectrum.

2. A spectral distance calculator according to claim 1, characterized by means for assigning the spectral distance between the input spectrum and the reference spectrum a zero value for each frequency of the input spectra which is due to noise.

3. A spectral distance calculator according to claim 1 or 2, characterized in that said noise has a lower level than the input spectrum.

4. A speech recognition system for comparison of an input spectrum and a reference spectrum including a spectral distance calculator according to ~~any of claims 1-3~~, characterized by selecting means for selecting a reference spectrum minimizing a complete spectral distance between the input spectrum and the reference spectrum.

5. A speech recognition system according to claim 4, characterized in that said complete spectral distance is the sum of the spectral distance calculations for the number of samples discerning the reference spectra from each other.